Maximum Width of Binary Tree (View)

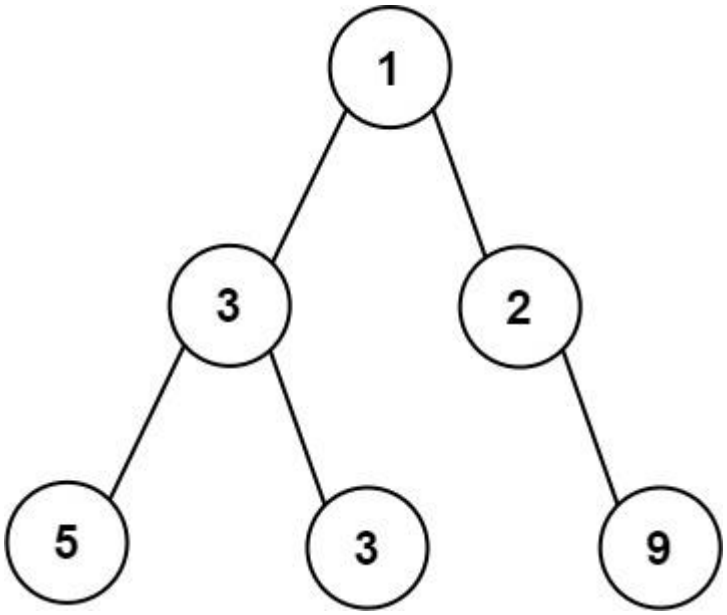
Given the `root` of a binary tree, return *the **maximum width** of the given tree*.

The **maximum width** of a tree is the maximum **width** among all levels.

The **width** of one level is defined as the length between the end-nodes (the leftmost and rightmost non-null nodes), where the null nodes between the end-nodes are also counted into the length calculation.

It is **guaranteed** that the answer will in the range of **32-bit** signed integer.

Example 1:

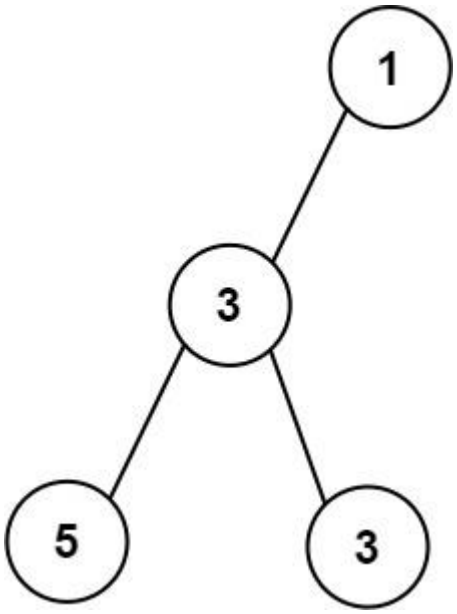



```
Input: root = [1,3,2,5,3,null,9]

Output: 4

Explanation: The maximum width existing in the third level with the length 4
(5,3,null,9).
```

Example 2:

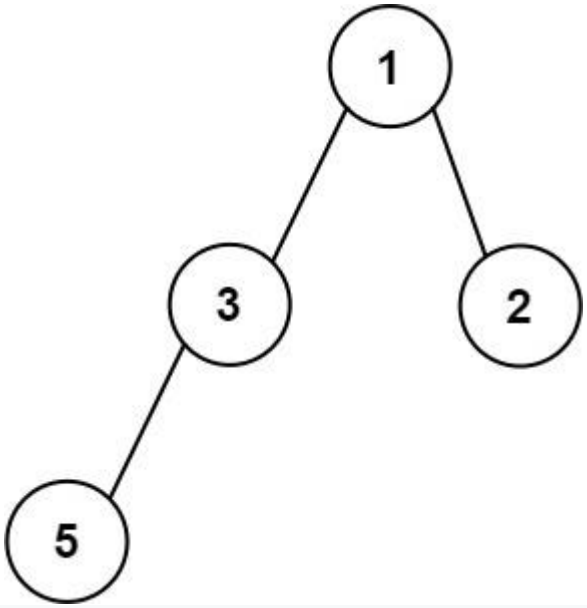



```
Input: root = [1,3,null,5,3]

Output: 2

Explanation: The maximum width existing in the third level with the length 2
(5,3).
```

Example 3:




```
Input: root = [1,3,2,5]

Output: 2

Explanation: The maximum width existing in the second level with the length 2
(3,2).
```

Constraints:

- The number of nodes in the tree is in the range `[1, 3000]`.
- `-100 <= Node.val <= 100`